

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A vehicular rearview mirror system, comprising:  
a digital electrochromic mirror system, including a digital drive circuit and an electrochromic reflective element, said reflective element assuming a partial reflectance level in response to a drive signal, said drive circuit providing a drive signal to said reflective  
5 element;  
a garage door opener, including a transmitter and a logic circuit, said logic circuit supplying signals to said transmitter for transmitting garage door opening signals;  
a microcontroller defining, at least in part, said digital drive circuit and said logic circuit, wherein said digital electrochromic mirror system has components in common with  
10 said garage door opener; and  
said microcontroller communicating over a vehicle network with at least one other module performing at least one other vehicle function.
2. The vehicle rearview mirror system of claim 1 wherein said vehicle network comprises a plurality of wired network interconnections.
3. The vehicle rearview mirror system of claim 2 wherein said wired network has a protocol selected from the group consisting of a LIN, a CAN and a LAN.
4. The vehicle rearview mirror system of claim 2 wherein said vehicle network comprises at least one of a wire, a cable and a fiber-optic link.
5. The vehicle rearview mirror system of claim 1 wherein said vehicle network comprises at least partially a wireless network.
6. The vehicle rearview mirror system of claim 5 wherein said wireless network comprises a short-range radio-frequency network.
7. The vehicle rearview mirror system of claim 6 wherein said wireless network at least partially follows a BLUETOOTH protocol.

8. The vehicle rearview mirror system of claim 5 wherein said wireless network comprises at least one of infrared interconnections and radio-frequency interconnections.
9. The vehicle rearview mirror system of claim 1 wherein said digital drive circuit and said logic circuit are at least partially on a common circuit board.
10. The vehicle rearview mirror system of claim 1 including a battery supplying power to said digital drive circuit and said logic circuit that is separate from vehicle ignition.
11. The vehicle rearview mirror system of claim 10 wherein said battery is rechargeable.
12. The vehicle rearview mirror system of claim 11 including a solar power system for charging said battery.
13. The vehicle rearview mirror system of claim 1 wherein said at least one module performing at least one other vehicle function includes at least one additional mirror assembly including another electrochromic reflective element that assumes a partial reflectance level in response to another drive signal and wherein said microcomputer supplies  
5 a partial reflectance level value to said additional mirror assembly over said network.
14. The vehicle rearview mirror system of claim 13 wherein said digital electrochromic mirror system comprises an interior rearview mirror assembly and said at least one additional mirror assembly comprises at least one exterior rearview mirror assembly.
15. The vehicle rearview mirror system of claim 14 wherein said at least one additional mirror assembly comprises at least two mirror assemblies and wherein said at least two mirror assemblies comprise a driver-side exterior mirror assembly and a passenger-side exterior mirror assembly.
16. The vehicle rearview mirror system of claim 1 wherein said at least one module performing at least one other vehicle function includes at least one of an instrument panel and a headlight control circuit and wherein ambient light level information is provided to said at least one of an instrument panel and a headlight control circuit over said network.

17. The vehicle rearview mirror system of claim 16 wherein said ambient light level information is developed with said digital electrochromic mirror system.

18. The vehicle rearview mirror system of claim 1 wherein said at least one module performing at least one other vehicle function includes a reverse gear detection module and wherein said digital electrochromic mirror system responds to reverse gear information sent from said reverse gear detection module over said network to establish a high-reflectance  
5 level of said electrochromic reflective element.

19. The vehicle rearview mirror system of claim 1 including a positioning system for positioning said reflective element and wherein said at least one module performing at least one other vehicle function includes a memory module and wherein said network supplies memory values from said memory module to operate said positioning system.

20. The vehicle rearview mirror system of claim 1 further including a digital sound-processing system, wherein said digital sound-processing system has components in common with said digital electrochromic mirror system and said garage door opener.

21. A vehicular rearview mirror system, comprising:  
an interior rearview mirror system comprising an electrochromic reflective element, said reflective element assuming a partial reflectance level in response to a drive signal, a housing for said an electrochromic reflective element, and a circuit board in said housing,  
5 a digital electrochromic drive circuit on said circuit board, said drive circuit supplying a drive signal to said reflective element;  
a garage door opener at least partially on said circuit board, said garage door opener including a transmitter and a logic circuit, said logic circuit supplying signals to said transmitter for transmitting garage door opening signals;  
10 a microcontroller defining, at least in part, said digital drive circuit and said logic circuit, wherein said digital electrochromic mirror system has components in common with said garage door opener; and  
said microcontroller communicating over a vehicle network with at least one module performing at least one other vehicle function.

22. The vehicular rearview mirror system of claim 21 wherein said vehicle network comprises at least wired network connections.

23. The vehicular rearview mirror system of claim 22 wherein said vehicle network has a protocol selected from the group consisting of a LIN, a CAN and a LAN.

24. The vehicular rearview mirror system of claim 23 wherein said vehicle network comprises at least one of wire, cable and fiber-optic.

25. The vehicular rearview mirror system of claim 21 wherein said vehicle network is at least partially a wireless network.

26. The vehicular rearview mirror system of claim 25 wherein said wireless network comprises a short-range network.

27. The vehicular rearview mirror system of claim 26 wherein said wireless network has a BLUETOOTH protocol.

28. The vehicular rearview mirror system of claim 25 wherein said wireless network comprises at least one of infrared and radio-frequency.

29. The vehicle rearview mirror system of claim 21 including a battery supplying power to said digital drive circuit and said garage door opener that is separate from vehicle ignition.

30. The vehicle rearview mirror system of claim 29 wherein said battery is rechargeable.

31. The vehicle rearview mirror system of claim 30 including a solar system for charging said battery.

32. The vehicle rearview mirror system of claim 21 wherein said at least one module performing at least one other vehicle function includes at least one additional mirror assembly including another electrochromic reflective element that assumes a partial reflectance level in response to another drive signal and wherein said microcomputer supplies a partial reflectance level value to said additional mirror assembly over said network.

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33. The vehicle rearview mirror system of claim 32 wherein said digital electrochromic mirror system comprises an interior rearview mirror system and said at least one additional mirror assembly comprises at least one exterior rearview mirror assembly.
34. The vehicle rearview mirror system of claim 33 wherein said at least one additional mirror assembly comprises at least two mirror assemblies and wherein said at least two mirror assemblies comprise a driver side exterior mirror assembly and a passenger side exterior mirror assembly.
35. The vehicle rearview mirror system of claim 21 wherein said at least one module performing at least one other vehicle function includes at least one of an instrument panel and a headlight control circuit and wherein ambient light level information is provided to said at least one of an instrument panel and a headlight control circuit over said network.
36. The vehicle rearview mirror system of claim 35 wherein said ambient light level information is developed with said digital electrochromic mirror system.
37. The vehicle rearview mirror system of claim 21 wherein said at least one module performing at least one other vehicle function includes a reverse gear detection module and wherein said digital electrochromic mirror system responds to reverse gear information from said reverse gear detection module sent over said network to establish a high reflectance level  
5 of said electrochromic reflective element.
38. The vehicle rearview mirror system of claim 21 including a positioning system for positioning said reflective element and wherein said at least one other module performing other vehicle functions include a memory module and wherein said network supplies memory values retrieved from said memory module to operate said positioning system.
39. The vehicle rearview mirror system of claim 21 further including a digital sound-processing system, wherein said digital sound-processing system has components in common with said digital electrochromic mirror system and said garage door opener.